



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-0716; Directorate Identifier 2011-NM-013-AD; Amendment 39-16858; AD 2011-23-07]

RIN 2120-AA64

Airworthiness Directives; Gulfstream Aerospace LP (Type Certificate Previously Held by Israel Aircraft Industries, Ltd.) Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Gulfstream Aerospace LP (type certificate previously held by Israel Aircraft Industries, Ltd.) Model Galaxy and Gulfstream G150 airplanes; and Gulfstream Aerospace LP Model Gulfstream 200 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

A broken aileron servo actuator centering spring rod was discovered on a model G100 aircraft during a routine scheduled maintenance inspection. * * * This latent failure of a centering spring rod, if not detected and corrected, in conjunction with the disconnection of the normal mechanical control system of the same servo actuator would lead to loss [of] control of the flight control surface [aileron or elevator]. This condition would reduce the

control capability of the airplane and imposes a higher workload on the flight crew reducing their ability to cope with adverse operating conditions.

We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mike Borfitz, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-2677; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on July 14, 2011 (76 FR 41432). That NPRM proposed to correct an

unsafe condition for the specified products. The MCAI states:

A broken aileron servo actuator centering spring rod was discovered on a model G100 aircraft during a routine scheduled maintenance inspection. This centering spring rod is common to all Gulfstream Mid Cabin model (G100, G150 and G200) aileron control servo actuators and the G200 elevator control servo actuator too. The function of the centering spring rod is to maintain the affected servo actuator and its associated flight control surface in a centered position in the event of a disconnect of the normal mechanical control system input from the flight crew to the same servo actuator. This latent failure of a centering spring rod, if not detected and corrected, in conjunction with the disconnection of the normal mechanical control system of the same servo actuator would lead to loss [of] control of the flight control surface/aileron. This condition would reduce the control capability of the airplane and imposes a higher workload on the flight crew reducing their ability to cope with adverse operating conditions.

The required actions include a detailed inspection of the servo actuator centering spring rods for the aileron and elevator to detect fractured or broken rods, and replacing the rods if necessary. You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (July 14, 2011 (76 FR 41432)) or on the determination of the cost to the public.

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a NOTE within the AD.

Costs of Compliance

We estimate that this AD will affect about 200 products of U.S. registry. We also estimate that it will take about 19 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$323,000, or \$1,615 per product.

In addition, we estimate that any necessary follow-on actions would take up to 20 work-hours and require parts costing \$0, for a cost of \$1,700 per product. We have no way of determining the number of products that may need these actions. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these costs. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on

aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (July 14, 2011 (76 FR 41432)), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

2011-23-07 Gulfstream Aerospace LP (Type Certificate Previously Held by Israel Aircraft Industries, Ltd.): Amendment 39-16858. Docket No. FAA-2011-0716;

Directorate Identifier 2011-NM-013-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Affected ADs

(b) None.

Applicability

(c) This AD applies to the products identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category.

(1) Gulfstream Aerospace LP (Type Certificate previously held by Israel Aircraft Industries, Ltd.) Model Gulfstream G150 airplanes, serial numbers 201 through 286 inclusive.

(2) Gulfstream Aerospace LP (Type Certificate previously held by Israel Aircraft Industries, Ltd.) Model Galaxy airplanes; and Gulfstream Aerospace LP Model Gulfstream 200 airplanes; serial numbers 004 through 231 inclusive.

Subject

(d) Air Transport Association (ATA) of America Code 27: Flight controls.

Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

A broken aileron servo actuator centering spring rod was discovered on a model G100 aircraft during a routine scheduled maintenance inspection. * * * This latent failure of a centering spring rod, if not detected and corrected, in conjunction with the disconnection of the normal mechanical control system of the same servo actuator

would lead to loss [of] control of the flight control surface [aileron or elevator]. This condition would reduce the control capability of the airplane and imposes a higher workload on the flight crew reducing their ability to cope with adverse operating conditions.

Compliance

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Inspection

(g) Within 12 months after the effective date of this AD, do the actions specified by paragraph (g)(1) or (g)(2) of this AD, as applicable.

(1) For Model Gulfstream G150 airplanes: Do a one-time detailed inspection of the aileron control servo actuators to detect fractured or broken centering spring rods, in accordance with the Accomplishment Instructions of Gulfstream Service Bulletin 150-27-123, Revision 1, dated January 27, 2011.

(2) For Model Galaxy and Gulfstream 200 airplanes: Do a one-time detailed inspection of the aileron and elevator control servo actuators to detect fractured or broken centering spring rods, in accordance with the Accomplishment Instructions of Gulfstream Service Bulletin 200-27-374, Revision 1, dated January 27, 2011.

Corrective Actions

(h) If any centering spring rod is found fractured or broken during any inspection required by this AD: Before further flight, replace the centering spring rod in accordance with a method approved by the Manager, International Branch, ANM 116, Transport Airplane Directorate, FAA, or the Civil Aviation Authority of Israel (CAAI) (or its

delegated agent).

Credit for Actions Accomplished in Accordance with Previous Service Information

(i) Actions done before the effective date of this AD in accordance with Gulfstream Service Bulletin 150-27-123 or 200-27-374, both dated October 27, 2010, as applicable, are considered acceptable for the actions required by paragraph (g) of this AD.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows:
The MCAI AD does not specify a corrective action for fractured or broken rods; however, paragraph (h) of this AD requires corrective action.

Other FAA AD Provisions

(j) The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Mike Borfitz, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-2677; fax (425) 227-1149. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate

holding district office. The AMOC approval letter must specifically reference this AD.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

Related Information

(k) Refer to MCAI Israeli Airworthiness Directives 27-10-11-03, dated December 6, 2010, and 27-10-12-29, dated January 4, 2011; and Gulfstream Service Bulletins 150-27-123 and 200-27-374, both Revision 1, both dated January 27, 2011; for related information.

Material Incorporated by Reference

(l) You must use Gulfstream Service Bulletin 150-27-123, Revision 1, dated January 27, 2011; or Gulfstream Service Bulletin 200-27-374, Revision 1, dated January 27, 2011; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Gulfstream Aerospace Corporation, P.O. Box 2206, Mail Station D-25, Savannah, Georgia 31402-2206; telephone 800-810-4853; fax 912-965-3520; e-mail pubs@gulfstream.com; Internet http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on October 20, 2011.

Kalene C. Yanamura,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2011-28572 Filed 11/09/2011 at 8:45 am; Publication Date: 11/10/2011]